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Aim: To determine: the causative effect between airbag deployment and otological injuries; types of otological pathologies caused and the factors in determining the extent of otological injury. To construct an up to date, evidence based literature review.

Method: We conducted an extensive retrospective literature review. 43 key words relating to the topic were entered into MEDLINE, EMBASE and CINAHL databases. This yielded 30 papers, which were assessed by two independent assessors for relevance before 23 full text articles were collated to form the literature review.

Result: Confounding factors included the existence of an otological pathology or hearing loss prior to the accident. We discovered that sensorineural hearing loss was the predominant form of injury across the cases reviewed. The height and position of the ear in relation to the airbag and interior volume of vehicle were found to be influential factors in causing otological injury.

Conclusion: Our review has found a causal effect between airbag deployment and otological injury. Whilst airbags are the predominant secondary safety feature in vehicles, subsequent otological injury is unlikely. However, there is a need for further research in the matter in order to produce a definitive evidence based management strategy.

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1363: ENDOSCOPIC PHARYNGEAL POUCH STAPLING – A REVIEW OF OVER 300 CONSECUTIVE CASES IN OXFORD, UK

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Introduction: Pharyngeal diverticulum is a cause of cervical dysphagia. It affects patients over 50 years of age, with an estimated incidence in the west of 1/100 000. While surgery is usually the treatment the type of operation is controversial. This study reviews all endoscopic pharyngeal pouch stapling operations completed by a single surgeon between 1992–2011.

Method: A retrospective review of all patients undergoing an endoscopic pharyngeal pouch stapling procedure between 1992 and 2011. Data was collected including previous surgical intervention, co-morbidities, pouch size, complications, recurrence and outcome.

Result: 320 patients were identified, the age range was 46–96, average 88. At follow-up there was a subjective success rate of 88%, with a mean length of stay of 2.2 days. In total 14% of patients had reoccurrence of symptoms requiring repeat surgical intervention. There were 7 cases of dental injury, 1 perforation and 1 post-operative hemorrhage, no deaths.

Conclusion: To date no large retrospective study has been able to give an accurate recurrence rate for pouch stapling. Our study indicates a recurrence rate in 14% of patients. This review shows the technique has a high success rate with low risks and is recommended by the NICE guidelines in 2003.

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Hernia

0203: INGUINAL HERNIA REPAIR IN WALES – ARE WELSH SURGEONS FOLLOWING THE GUIDELINES?

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Introduction: In 2007 NICE published its guidance on the use of laparoscopic repair for inguinal hernias and in 2013 ASGBI produced its consensus document. A previous Welsh study showed low uptake of

laparoscopic inguinal hernia repair. This study aimed to re-assess current practice for inguinal hernia repair against the published guidance.

Method: An online questionnaire survey of Consultant surgeons in Wales.

Result: 40% of surgeons perform laparoscopic inguinal hernia repair compared to 15% previously; 64% performed TEPP, 24% TAPP and 11% performed both. 85% agreed with the NICE guidance compared to 10% in 2007. 99% of surgeons perform hernia repair as day cases compared to 15% in 2007. The uptake of repairs under local anaesthesia (LA) has doubled from 15% to 30%; 41% of surgeons do not use any form of thromboprophylaxis for elective inguinal hernia repair (unchanged). Routine antibiotic prophylaxis has increased from 78% to 89%.

Conclusion: This survey demonstrates there has been significant improvement in the management of inguinal hernias in Wales over the last 8 years. However, there is still room for improvement regarding the use of laparoscopic repair and LA repair.

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0287: DOES INGUINAL HERNIA REPAIR AFFECT MALE FERTILITY? A SYSTEMATIC REVIEW

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Aim: The aim of this systematic literature review was to assess impact of inguinal hernia repair on male fertility.

Method: An electronic search of literature in Medline, Scopus, Embase and Cochrane library from 1966 to 2015 according to PRISMA checklist was performed. Quality assessment and recommendation for practice was assessed by Oxford critical appraisal skills programme and National Institute for Health and Care Excellence. This resulted in a total of ten studies comprising 35,740 patients.

Result: 20.2% (n = 7223) had non-mesh open repair, 79% (n = 28357) had open mesh repair and 0.4% (n = 160) had laparoscopic mesh repair (TEP and TAP). Sperm quality could be affected following any type and/or technique of inguinal hernia repair but this is limited to the immediate postoperative period (≤ 48 hours). Obstructive azoospermia was noted in 0.03% of open and 2.5% of bilateral laparoscopic (TAP) hernia repair with mesh. Male infertility was detected in 0.8% of the open mesh hernia repair with no correlation to the type of mesh used.

Conclusion: 'Male infertility' may be required to be included in the informed consent for inguinal hernia repair.

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0653: PARAUMBILICAL HERNIA REPAIR UNDER LOCAL ANAESTHESIA IS FEASIBLE IN OVERWEIGHT AND OBESE PATIENTS

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Aim: Paraumbilical hernia repair (PUH) under local anaesthetic (LA) in the overweight is commonly considered technically difficult. In this study, we examined the feasibility of performing PUH repair under LA in patients of differing BMI.

Method: All patients undergoing PUH repair under LA between January 2010 and December 2015 were prospectively recorded. Data on BMI, operative time, LA use, pain scores and satisfaction rates (visual analogue scale 0–100) were recorded. Comparisons were made between normal (BMI < 25), overweight (BMI > 25) and obese (BMI > 30) patients.

Result: Of 74 patients undergoing PUH repair, 22 had BMI < 25, 25 were overweight and 27 obese. There were no significant differences between normal and overweight patients in operative time (21 v 23 minutes, p = 0.755), LA use (27 v 31 ml, p = 0.14), pain score (20 v 17, p = 1) and satisfaction (93% v 96%, p = 0.179). Similarly, there were no differences in operative time (21 v 25 minutes, p = 0.385), LA use (27 v 34 ml, p = 0.055), pain score (20 v 17, p = 0.967) and satisfaction (93% v 96%, p = 0.164) between normal and obese patients.

Conclusion: This study indicates that PUH repair under LA can be a viable therapeutic option in all surgical candidates.